

REMARKS

[0001] Claims 1-20 are pending in the case. Claims 1, 8, and 15 are independent claims. In the Office Action, Claims 1-20 stand rejected under 35 U.S.C. §103(a). Claims 8-20 stand rejected under 35 U.S.C. § 101.

AMENDMENTS

[0002] Applicants have cancelled a previous amendment to the specification filed on January 11, 2007, by including an amendment to restore the original language. Specifically, page 3 was amended to address a potential 35 USC §101 concern, however that amendment is now cancelled and the § 101 concern is now addressed in current amendments to Claims 8-20.

REJECTION OF CLAIMS UNDER 35 U.S.C. §101

[0003] The Office Action rejected Claims 8-20 under 35 U.S.C. §101 as being directed toward non-patentable subject matter. Applicants have currently amended Claims 8-20 to overcome this rejection. The Office Action states that the computer readable medium when “interpreted as the disclosed network medium is directed towards non-statutory subject matter such as transmission protocols such as Ethernet, token-ring and radio waves and wireless mediums.” In response, Applicants have amended Claims 8-14 to direct the claims toward a “computer program product comprising a tangible computer useable medium having stored thereon computer executable instructions for performing a method for ensuring client access to unpaired messages from a database management system (DBMS) server, the computer useable medium operable within a memory device and executable on a processor, the computer program product comprising.”

[0004] With regard to Claims 15-20, the Office Action states that those claims are “directed towards a system comprised only of software.” Claim 15 has been amended to include hardware components such as a “DBMS server comprising a memory and a processor” and “a client.”

[0005] Applicants respectfully submit that these amendments overcome the § 101 rejection of Claims 8-20. Consequently, Applicants respectfully request that the rejection of Claims 8-20 under § 101 be withdrawn.

REJECTION OF CLAIMS UNDER 35 U.S.C. §103(a)

[0006] The Office Action rejected Claims 1-20 under 35 U.S.C. §103(a) as obvious under U.S. Patent No. 6,269,402 to Lin et al (hereinafter Lin) in view of U.S. Patent No. 6,877,036 to Smith et al., (hereinafter Smith) and in view of U.S. Patent No. 5,781,739 to Bach et al. (hereafter Bach). Applicants respectfully traverse this rejection.

[0007] It is well known that in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2142 under the heading "ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS."

Claims 1-14

[0008] Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Smith and further in view of Bach. However, Applicants respectfully submit that there is no suggestion or motivation to modify the references or to combine the plurality of reference teachings. Furthermore, the combination of the references fails to teach or suggest all of the claim limitations. Therefore, the Office Action fails to make a *prima facie* case of obviousness.

[0009] The Office Action states that "It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Lin regarding a system for ensuring a client access to unpaired message[s] with the teachings of Smith regarding the use of an output queue because the use of an output queue **reduces**

the load on a server's CPU." (Emphasis added). However, even though Smith mentions a need for a reduced CPU load, the Applicants are unable to discover in Lin any suggestion that Lin is in any way concerned with or related to reducing the load on a server's CPU. Lin is directed toward "implementing a seamless communication session, survivable among bearers and across multiple connections" as well as resolving the issue "of lingering messages and changes in envelope identifiers in a communication system." See Lin, col. 2, lines 15-16 and col. 2, lines 42-44. However, Lin makes no mention of a need for a reduced CPU load.

[0010] According to the MPEP § 2143.01, "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). In this case, the nature of the problem to be solved in Smith of reducing the CPU load is unrelated to the problems to be solved in Lin (lingering messages). Additionally, Applicants are unable to find and the Office Action makes no mention of "teachings of the prior art" or "knowledge of persons of ordinary skill in the art" that might reasonably lead to the combination of Smith and Lin. Therefore, Applicants respectfully submit that there is no suggestion or motivation to combine Smith with Lin, because the need for a reduced CPU load as recited in Smith would not reasonably lead one of ordinary skill in the art to combine Smith with the teachings disclosed by Lin.

[0011] Furthermore, even if Lin were concerned with a reduced CPU load, Applicants are unable to find any teaching or suggestion in Smith that a combination with Lin, and in particular the use of an output queue, would help to reduce the load on a server's CPU. Smith is directed to "relieving the server CPU of [a] connection management burden, thus allowing the server to more efficiently host an increased number of clients." See Smith, col. 1, lines 41-44. However, Smith goes on to say that Smith resolves this problem by "facilitat[ing] off-loading the connection management burden from the host CPU to an adapter card interposed between the network and the host bus." Thus Smith appears to assert that the use of an adapter and **not** the use of an output queue helps to reduce the CPU load. Therefore, even if Lin were in some way related to the problem of reducing a CPU load, there appears to be no suggestion or motivation in either Smith or Lin to combine the output

queue recited in Smith with the teachings recited in Lin. Therefore, a *prima facie* case of obviousness has not been made with regard to Lin in view of Smith, and Applicants respectfully request that the rejection of Claim 1 under § 103 be withdrawn.

[0012] The Office Action further asserts that it would have been obvious to combine Bach with Lin. Bach is directed toward “the mapping of communication protocols” for “effectively communicating between the World-Wide Web (WWW) and IBM’s Information Management System (IMS)” and is also directed toward providing “the ability of using a TCP/IP protocol to communicate to IMS through OTMA.” See Bach, col. 1, lines 16-21 and lines 44-46.

[0013] The Office Action states that “it would have been obvious to one of ordinary skill in the Computer Networking art at the time of the applicant’s invention to combine the teachings of Lin regarding message management with the teachings of Bach regarding message management in an OTMA context because OTMA is a commonly used server management scheme (Bach, col. 1, lines 16-59).” However, Applicants respectfully disagree with the Office Action’s characterization of OTMA as a commonly used server management scheme. Bach does not state that OTMA is a “commonly used server management scheme,” but only provides a means by which a TCP/IP protocol may communicate via OTMA. In addition, Bach fails to relate to the problem of managing paired and unpaired messages. Bach simply deals with translation of data between a TCP/IP message and an OTMA message.

[0014] In contrast, Claim 1 recites “communicating transaction requests and transaction responses using an Open Transaction Manager Access (OTMA) protocol which allows the client to request at least one unpaired message stored in the unpaired message queue.” Hence, the OTMA protocol is used communicate with the clients for retrieval of unpaired messages. Bach simply discusses OTMA as an interface protocol not as a protocol enabling a client to access unpaired messages, after a lost connection for example.

[0015] The Office Action provides no other support for the assertion that OTMA is a “commonly used server management scheme” or that it was commonly used at the time of the invention. Applicants submit that, without objective evidence to the contrary, the assertion that OTMA is a “commonly used server management scheme” is based on impermissible hindsight provided by Applicant’s disclosure.

[0016] Furthermore, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See MPEP § 2143.01; *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Thus, just because OTMA is a protocol that can be used with a server is not a suggestion that would reasonably lead one of skill in the art to use such a scheme in combination with Lin and/or Smith.

[0017] As discussed in MPEP § 2143.01(IV), a statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993); MPEP § 2143.01 (IV). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000). Similarly a statement that “OTMA is a commonly used server management scheme” absent some objective reason to combine Bach with Lin is not sufficient to establish a *prima facie* case of obviousness. Therefore, a *prima facie* case of obviousness has not been made with regard to Lin in view of Bach, and Applicants respectfully request that the rejection of Claim 1 under § 103 be withdrawn.

[0018] Furthermore, the combination of Lin, Smith, and Bach fails to teach every limitation of Claim 1. The Office Action concedes that Lin does not explicitly teach the “unpaired message data structure being an unpaired message queue” as recited in Claim 1. The Office Action then states that “Smith teaches the use of an output queue in a system for managing connections between clients and server” as anticipating the “unpaired message queue” of Claim 1. Applicants disagree.

[0019] Applicants note that an unpaired message queue is fundamentally different from the an average output queue as recited in Smith. Unpaired message queues hold only unpaired messages that were not deliverable to a particular client. Consequently, Smith fails to teach the missing “unpaired message data structure being an unpaired message queue” of Claim 1.

[0020] Furthermore, Applicants note that the Office Action fails to recite an equivalent teaching in Linn, Smith, or Bach, regarding the limitation in Claim 1 of

“creating the unpaired message queue in a DBMS server **separate** from a paired message queue.” (Emphasis added.) The references of record fail to discuss two separate queues. In fact, the text of Smith cited in the Office Action merely references a step in a method wherein a proxy receives a response to a client communication from the server and fails to make any distinction between paired or unpaired queues. (See col. 8, line 65-col.9, line 26 and Figures 5 and 10.) Applicants recognize that output queues exist, however Applicants note a patentable difference between a single output queue and a paired message queue separate from an unpaired message queue.

[0021] In addition, Smith fails to teach or disclose paired and unpaired message queues that operate according to a FIFO protocol as recited in Claim 1. Claim 1 states “the unpaired message queue and paired message queue storing messages according to a First-In-First-Out protocol.” The Office Action fails to address this limitation of Claim 1, and Applicants are unable to find any reference to a FIFO protocol in any of the referenced citations provided in the Office Action. Thus, because Smith fails to teach every limitation recited in Claim 1, the Office Action fails to make a *prima facie* case of obviousness.

[0022] Because the Office Action fails to make a *prima facie* case of obviousness with regard to Claim 1, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 103 be withdrawn. Claims 2-7 depend from independent Claim 1, therefore applicants respectfully request that the rejection of those claims be withdrawn as well.

[0023] Independent Claim 8 includes substantially the same limitations as those recited in Claim 1. Therefore, Applicants respectfully request that the rejection of Claim 8 under 35 U.S.C. § 103 be withdrawn for the same reasons presented above with regard to Claim 1. Applicants further request that the rejection of Claims 9-14 also be withdrawn as depending from Claim 8.

Claims 15-20

[0024] Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Smith and Bach. Applicants respectfully submit that the Office Action fails to make a *prima facie* case of obviousness because there is no suggestion or

motivation to combine Lin with Smith and Bach as discussed above with regard to Claim 1, and because the Office Action fails to address the limitation of Claim 15 wherein “the unpaired response data structure and paired response data structure stor[e] messages according to a First-In-First-Out protocol” as discussed above with regard to Claim 1. Thus, because the Office Action fails to make a *prima facie* case of obviousness, Applicants respectfully request that the rejection of Claims 15-20 under 35 U.S.C. § 103 be withdrawn.

CONCLUSION

[0025] The Office Action fails to make a *prima facie* case of obviousness under 35 U.S.C. § 103 for each of the Claims 1-20. Consequently, Applicants submit that Claims 1-20 are in condition for prompt allowance.

[0026] In the event any questions remain, the Examiner is respectfully requested to initiate a telephone conference with the undersigned.

Respectfully submitted,

Date: July 2, 2007

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